

NSW SBS consumers may need to change their perspective

Dr Martin Gill

NSW Solar Bonus Scheme customers should ensure their solar system is net metered once the scheme ends. When moving from gross to net metering they should also change how they value their solar system.

NSW Solar Bonus Scheme

The NSW Solar Bonus Scheme (SBS) offered a subsidised feed in credit of 60 cents for every kWh generated by solar systems approved before mid-2010. To maximise the financial value of their solar system the majority of consumers installed an electricity meter measuring the total output of their solar system separately from household use (so called gross metering).

The NSW SBS comes to an end on 31st Dec 2016. To continue maximising the financial benefit of their solar system consumers should ensure their solar system is net metered. A net meter allows the consumer to use the electricity generated by their solar system.

While the change to net metering increases the financial value of the solar system it also means:

The value they receive from their solar system is no longer shown on their electricity bill

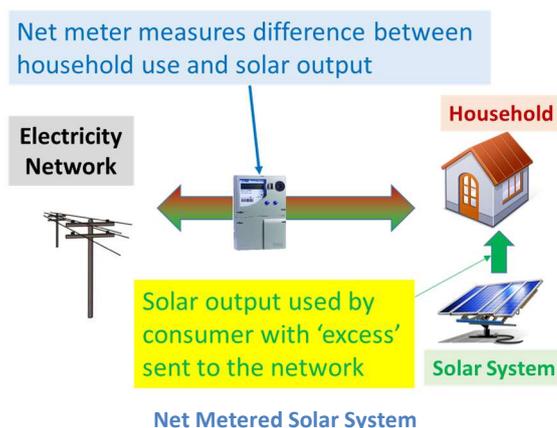
Summary of findings

The financial value of a gross metered solar system is clearly shown on the electricity bill as the feed in credit. The feed in credit shows the amount the consumer has received for electricity their solar system has sent to the network.

For a net metered solar system most of the savings arise from the amount of solar generated electricity the consumer uses. The amount of solar electricity they use and its value are not shown on the electricity bill.

Net Metering

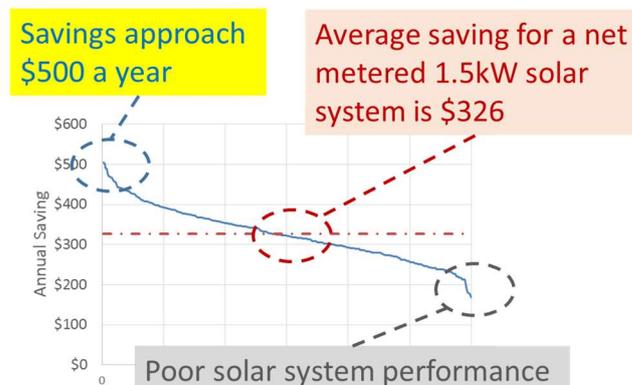
At the end of the NSW SBS consumers should install a net meter. A net meter allows the consumer to use the electricity generated by their solar system.



The above figure shows one meter making net measurements. The net meter allows the household to use the electricity generated by their solar system. The meter also measures the excess solar electricity eligible for the feed in credit.

Valuing Solar System output with Net Metering

The following shows the annual saving for 300 Sydney households assuming electricity use costs 25 cents/kWh and the feed in credit is 6 cents/kWh.



Annual saving for a net metered 1.5kW solar system in Sydney

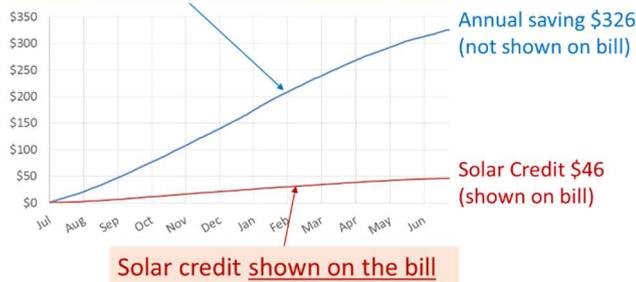
The above shows the average annual saving for a Sydney consumer with a 1.5kW solar system is \$326, even when the feed in credit is "only" 6 cents/kWh.

Most of the value of a net metered solar system is the electricity used by the household NOT the feed in credit

Annual savings not shown on the bill

For consumers on the NSW SBS the annual saving was clearly shown on their electricity bill. After switching to net metering the savings are no longer shown on the electricity bill. Comparing what is shown on the bill to the true saving is revealing:

Annual saving for a net metered solar system NOT shown on bill



Annual savings for Sydney consumers (1.5kW solar system)

The above shows annual savings from a 1.5kW solar system for an average Sydney consumer is \$326. The feed in credit shown on the bill only contributes \$46 towards this total saving.

The issue is one of perception with the electricity bill only showing a credit of \$46 and not the actual saving which is \$326

Selecting a retailer smart meter

NSW electricity prices were deregulated in July 2014. From that date all NSW consumers, including those on the NSW SBS, have been free to select a new electricity retailer. Competition between the retailers means NSW consumers can now choose from an almost bewildering number of different tariffs. Spending the time to select the right tariff provides a simple means of reducing annual electricity bills.

During 2016 the Government introduced other changes requiring retailers to offer smart meters to all their customers. **Significantly for NSW SBS customers several of these retailers are prepared to offer a net meter with no up-front fees.**

Choosing a suitable retail tariff and smart meter offers a simple means of significantly lowering annual

electricity costs compared to doing nothing or accepting the default tariff.

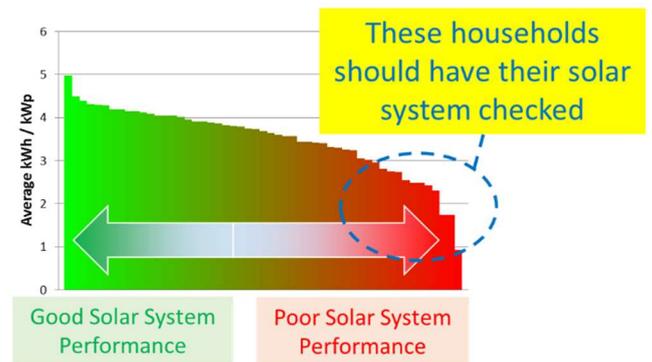


For this consumer with a 1.5kW solar system selecting a net meter offers a minimum annual saving of \$343 and as much as \$896.

Need to check solar system performance

While solar installers typically guarantee the lifetime of their solar panels for 20 years some installers only guarantee the solar inverter for 1 year (although reputable installers offer at least 5 years). If the solar inverter fails the consumer receives no benefits from the solar panels.

NSW SBS customers have been able to use their quarterly electricity bill to check the performance of their solar system. Once the net meter is installed the amount of electricity generated by the solar system is no longer shown on the electricity bill. While the bill may show some solar credit, this is not a reliable measurement of solar system performance.



Regularly checking solar system output can detect problems

Poor solar system performance reduces annual savings.

A possible solution

The author recently chose a new retailer installed smart meter. In addition to offering a smart meter with no up-front (or annual fees) the selected retailer has also committed to continue delivering separate measurements of his solar system output, even after the NSW SBS ends. He intends to use the

measurements to check the performance of his (aging) solar system.

Conclusion

NSW SBS customers wishing to maximise the financial benefits they receive from their solar system should ensure the output of their solar system is net metered.

During the NSW SBS consumers could easily check annual savings and solar system performance using their electricity bill. This changes once they install a net meter.

For a net metered solar system most of the savings arise from the amount of solar generated electricity they use. Unfortunately net meters do not measure the amount of solar generated electricity the consumer uses. From the start of 2017 electricity bills can no longer be used to check annual savings or solar system performance.

For example taking the typical Sydney household with a net metered 1.5kW solar system the annual credit shown on the bill will be a “measly” \$46. The bill will not show the \$326 the solar system actually saved them.

It is well worth shopping around for a new retailer offered smart meter. In addition to different tariffs at least one retailer intends to continue offering their customers separate measurements of the solar system output which can be used to calculate savings and check solar system performance.

Citation

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About Dr Martin Gill

Dr Gill is an independent consultant specialising in the provision of advice and data analysis to the energy industry. He has provided this advice to government regulators, distributors, retailers, consumers, asset operators and equipment vendors.

Dr Gill has a broad technical background having personally developed advanced communication modems, burglar alarms, electricity meters, high voltage fault monitors and power quality analysers.

Dr Gill is a metering expert. His innovative products have been recognised with the Green Globe Award, NSW Government’s Premier’s Award and Best New Product by the Australian Electrical and Electronics Manufacturers Association.

References

Source of 30 minute solar data used in the analysis (ausgrid.com.au)

The article “Comparing Net Solar Tariffs (for NSW Consumers)” shows how NSW SBS customers can use the Energy Made Easy tariff comparison website (drmartingill.com.au)

Comments or Questions?

The author is happy to receive comments or questions about this article. He can be contacted at martin@drmartingill.com.au